GANS, CARL. 1967. *Rhineura floridana.*
Catalogue of American Amphibians and Reptiles, p. 43.

Rhineura floridana (Baird)
Florida worm-lizard

Lepidosteron floridanum Baird, 1859:255. Type-locality "Micanopy, [Alachua County] Florida." Holotype, U. S. Natl. Mus. 3202, collected by J. B. Barratt.

Rhineura floridana: Cope, 1861: 75. Erection of new genus *Rhineura* for this species.

• CONTENT. No subspecies are recognized.

• DEFINITION. The only Recent species; see external characters stated under *Rhineura.*

• DESCRIPTION. (See Gans, 1966, for details of segmental nomenclature.) The horizontal keel of the depressed snout is covered by a wide, azygous rostro-nasal segment. This is followed along the middorsal line by a small, azygous prefrontal, a large azygous frontal, and paired parietals. A tiny rostral is flanked by 4 supralabials; a larger mental is flanked by 4 (3–5) infralabials, the last in each series much the largest. A tiny discrete nasal is above the first supralabial; this is followed by an irregular zone with several trapezoidal segments, the first in medial contact with the rostro-nasal, the last with a large segment(s) flanking the prefrontal. There may be a preocular which is in contact with the fourth supralabial and the frontal, immediately before the tiny ocular. One to one and one-half dorsal half-annuli occur before the first body annulus. Paired postmalars are flanked by large triangular "malars." There are no postgenitals or postmalars.

Sutures between the first four body annuli are wide and filled with one or more rows of tiny segments. Ventral portions of annuli six and seven have enlarged or fused segments. Body annuli number 237 to 264; there are 4 to 5 lateral and 14 to 17 caudal annuli. There are 23 to 32 irregular segments to a midbody annulus, the middorsal ones are one and a half times as long as wide, the midventral ones one and a half times as wide as long. A narrow dorsal sulcus occurs after the thirtieth body annulus. There are neither lateral nor ventral sulci. There are no precloacal pores. The precloacal shield is covered with several rows of irregular smaller segments, with generally only the medial pairs enlarged. The trunk is circular in cross section.

The tail is short, lacking autotomy, markedly depressed and with a spatulate tip. The dorsal segments are conical and produced; further irregularity is introduced by the appearance of much smaller, spherically-rounded segments, concentrated along the interannular raphes, but also interjecting themselves along intersegmental sutures and, in a few cases, forming atop the original segments.

The animal is reddish to purplish gray in life and semitranslucent ventrally. It is lighter in the region of nuchal tendons and of the extracolumellar attachments. The coloration fades rapidly after death.

Maximum total length is 38 cm (Telford, 1955); average adults are nearer 25 cm.

• ILLUSTRATIONS. Photographs were provided by Smith (1946), Pope (1956), and Carr, *et al.* (1963:28). Refer to generic account for specific structures.

• DISTRIBUTION. Carr (1940:77), Neill (1951), and Allen and Neill (1954) listed ecological associations in which this species has been taken. Since the range has never been documented, it seems useful to cite specific localities. The following standard museum abbreviations are used: AMNH, American Musem of Natural History; ANSP, Academy of Natural Sciences at Philadelphia; BM, British Museum (Natural History); CG, Carl Gans collection; CNHM, Field Museum of Natural History; HM, Hamburg Museum; IMZUT, Turin Museum; MCZ, Museum of Comparative Zoology; NMW, Vienna Museum; SMF, Senckenberg Museum; UF, University of Florida Museum; UIMNH, University of Illinois Museum of Natural History; UMMZ, University of Michigan Museum of Zoology; USNM, United States National Museum. Literature records are cited only for localities not documented by specimens.

GEORGIA: (no specific locality), MCZ. FLORIDA: *Columbia Co.*: Lake City, USNM. *Alachua Co.*: W. side Lake Santa Fe, UMMZ. Waldo, USNM. Gainesville, CG, CNHM, MCZ, UF, UMMZ. Micanopy, CG, MCZ, USNM [holotype]. *Levy Co.*: Chiefland, USNM. Sumner (Neill, 1951). Gulf Hammock (Neill, 1951). *Clay Co.*: Green Cove Springs (Neill, 1951). Gold Head Branch State Park, UF. *Putnam Co.*: St. John's River, USNM. Nr. Welaka, UMMZ.

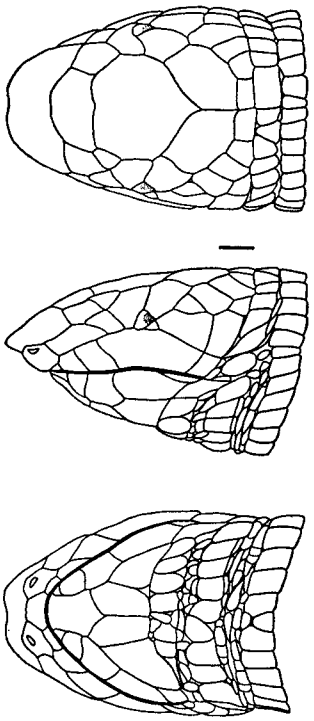


FIGURE 1. Dorsal, lateral, and ventral views of the head of *Rhineura floridana* from Gainesville, Florida. The line equals 1 mm.

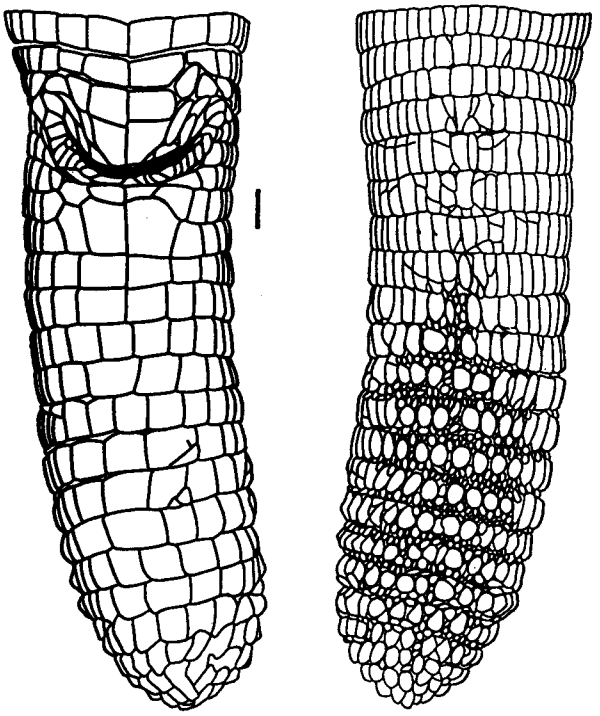
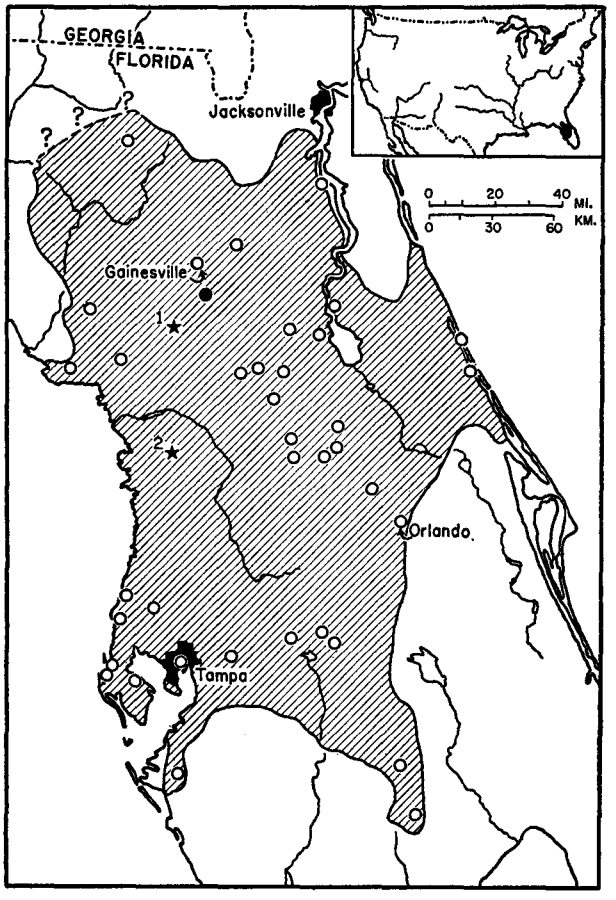


FIGURE 2. Dorsal and ventral views of the tail of *Rhineura floridana* from Gainesville, Florida. The line equals 1 mm.



MAP. The solid circle marks the type-locality. Hollow symbols represent other known localities. Stars mark fossil localities; see under "Fossil Record" for further information.

Marion Co.: Eureka, AMNH, UMMZ. Dunnellon, UF. Silver Springs, CNHM. Candler, UMMZ. Salt Springs (Neill, 1951). Ocala, CNHM. *Lake Co.*: Nr. Lake Joanna ?, USNM. Umatilla, USNM. Eustis, USNM. Tavares, UF, USNM. Leesburg, UMMZ. Mt. Dora, UF. Fruitland Park, USNM. *Flagler Co.*: Bunnell, UF. *Volusia Co.*: Port Orange, MCZ. Ormond (Blatchley, 1902). *Orange Co.*: Apopka, IMZUT. Orlando, ANSP, BM, CNHM, NMW, UF, UIMNH, USNM. *Polk Co.*: Auburndale, SMF, USNM. Winter Haven, AMNH, UF. Lakeland, CNHM. Phantom Grove?, CNHM. *Hernando Co.*: Bayport, UF. *Pasco Co.*: Argo, ANSP. Odessa, AMNH. *Pinellas Co.*: Tarpon Springs, ANSP. Clearwater, ANSP, USNM. Belleair, HM. Wieden Mound, W. coast of Tampa Bay, CNHM. *Hillsborough Co.*: Tampa, AMNH, UF. Dover (Neill, 1951). *Manatee Co.*: Manatee, USNM. *De Soto Co.*: — (Burt, 1937). *Highlands Co.*: Sebring, USNM. Lake Placid, AMNH, CNHM. Red Hill, nr. Hicoria, AMNH. Avon Park, UF.

• FOSSIL RECORD. Holman (1958:278) reported *Rhineura floridana* from the Pleistocene (Illinoian, 1 on map) of Williston, Florida, and later (1959:99) identified this species from the Pleistocene (Wisconsin, 2 on map) of Citrus County, Florida.

• PERTINENT LITERATURE. Neill (1951) and Allen and Neill (1954) discussed the general ecology of the species, amplifying the earlier account of Carr (1940). Allen and Neill (1954) and Carr (1949) reported the only data on egg laying behavior; the complement numbers 1 to 3 and the eggs may be held in the oviduct for some time (W. T. Neill, *in litt.*); early embryos are still unknown and very much needed. Bogert and Cowles (1947) determined the rate of water loss. Gans (1960) discussed the burrowing mechanics and general adaptive pattern.

• ETYMOLOGY. The specific name refers to the state of Florida.

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